

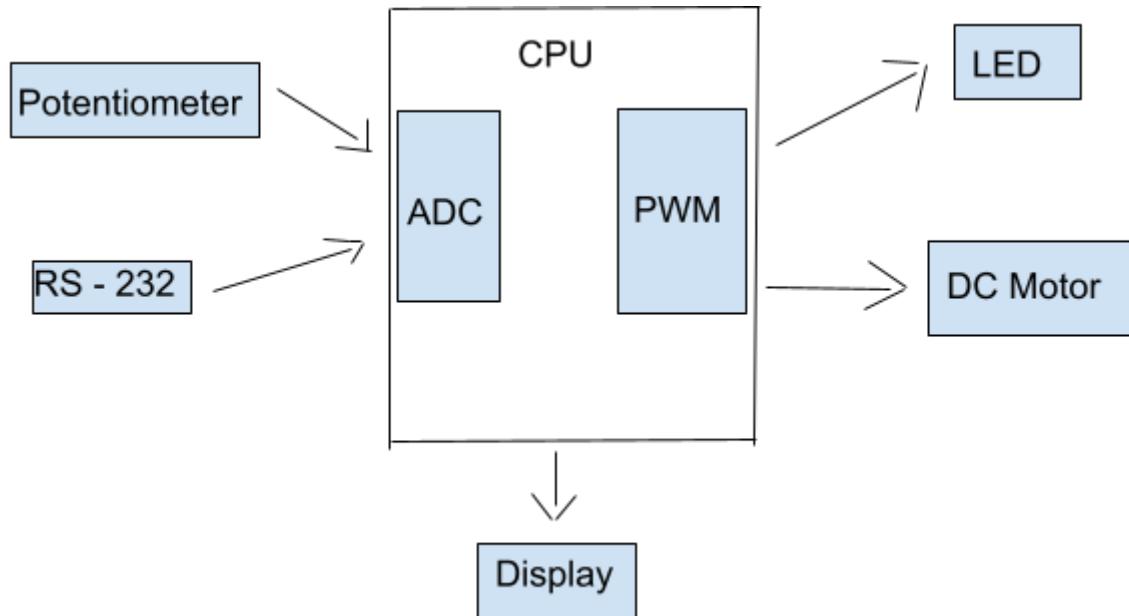
2023 Winter Project

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Dec.20.2023 - Jan.2.2024

1. User's Requirement:

Using ADC and PWM in CPU, Atmega644p, controls the brightness of LED and speed of DC Motor. Brightness of LED depends on the potentiometer, and the speed of DC Motor depends on RS - 232 communication.

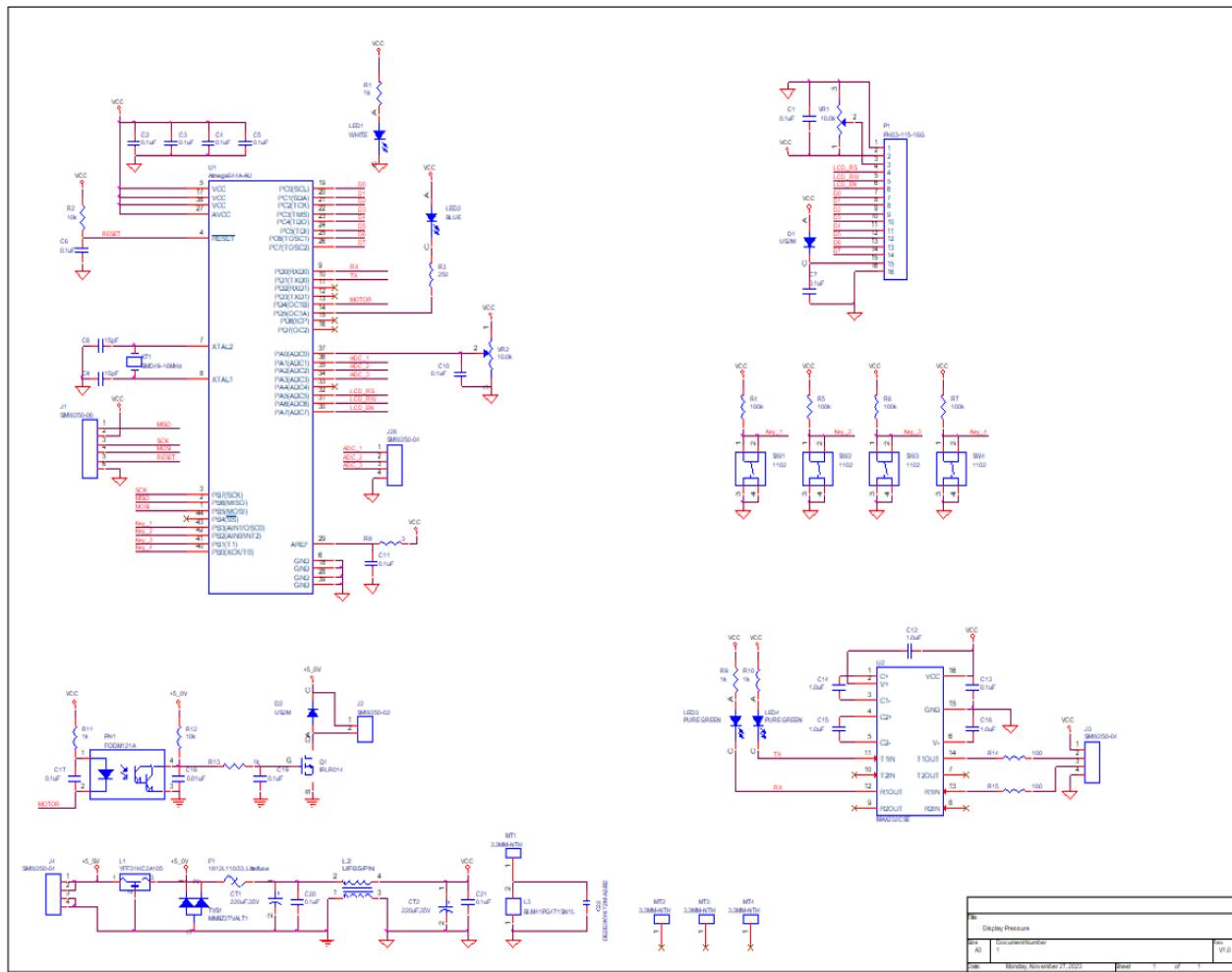
2. Configuration:



3. Task List

- Hardware
 - 1. Design Circuit Schematic
 - 2. Choose the parts
 - 3. Artwork to design PCB
 - 4. Design PCB
- Software
 - 1. Port I/O Define
 - 2. Set up LCD interface to display
 - 3. ADC set up
 - 4. PWM set up
 - 5. RS-232 set up
 - 6. Write main code

Circuit Schematic:

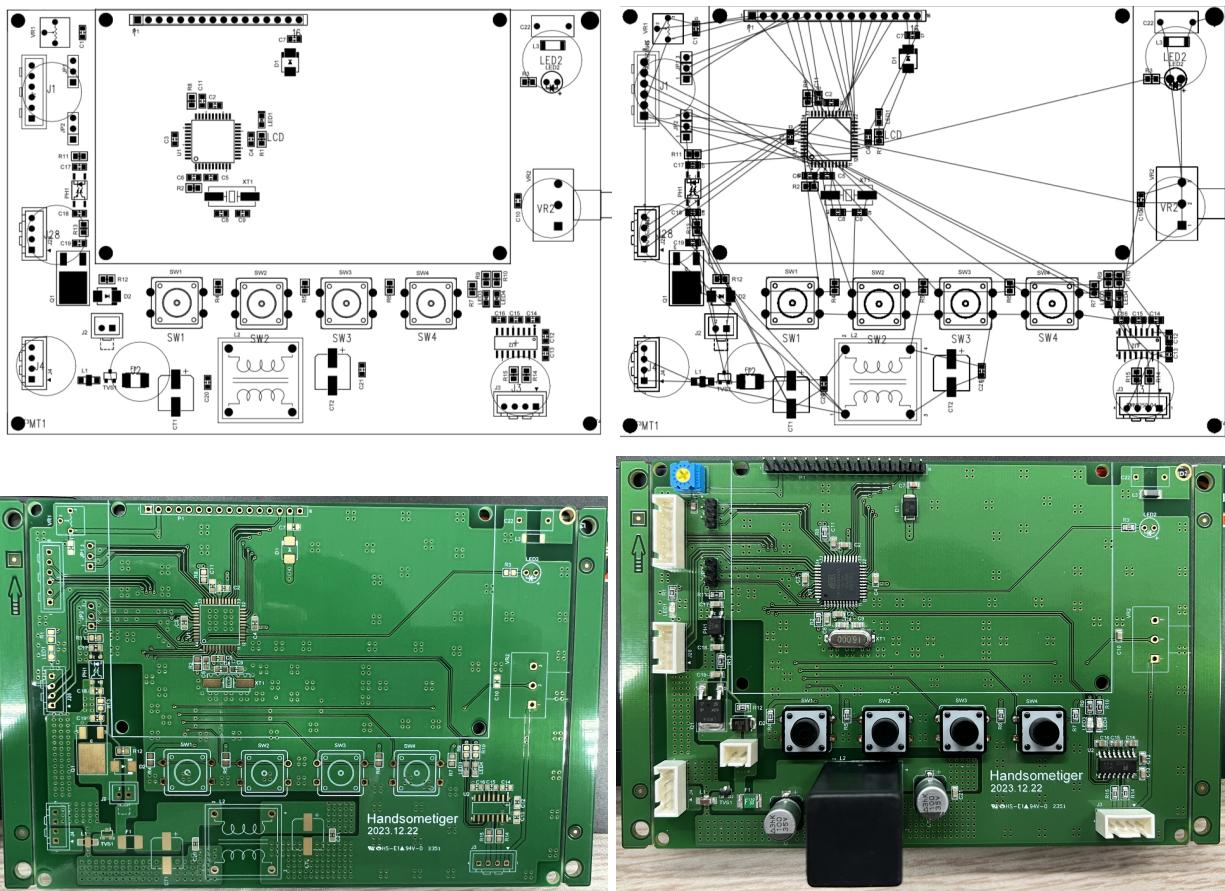


Display Pressure
(A)
Document Revision

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Date: Monday, November 21, 2022

PCB Design:



Port I/O Define:

Port I/O Define